Endotracheal Tubes & Cats

Endotracheal tubes (ETTs) are commonly used in cats during general anesthesia. Compared with dogs, cats seem to be at a higher risk for trauma during placement of tubes. This is a case report of a 5-year-old cat that was presented for surgical management of chronic bilateral otitis media and externa. The cat was premedicated with glycopyrrolate, hydromorphone, and acepromazine. Anesthesia was induced with IV diazepam and ketamine. After the patient lost jaw tone, endotracheal intubation was attempted. After 2 failed attempts, the ETT was passed with a moderate amount of force. Blood was observed on the temperature probe when it slipped out of the mouth. After the ETT was taken out, a laceration lateral to the patient’s right arytenoids was observed. The ETT had passed through this opening into the trachea. The ETT was then placed in the correct position, and the procedure was completed without complication. The cat was given IV methylprednisolone sodium succinate to reduce swelling within the airway. In the intensive care unit, the cat recovered in an oxygen cage with the ETT in place for an extended period. It was able to breathe normally following extubation and recovered with no respiratory problems. Topical lidocaine to reduce laryngospasm and direct laryngoscopy can facilitate proper intubation in cats.

COMMENTARY: The lesson to be learned from this experience is that it’s important to see what you are doing. Cats especially are difficult to intubate and, as this case illustrates, it doesn’t take much extra force to cause trauma.— The Editors


Anesthesia & Arrhythmias in Dogs

The type and frequency of cardiac dysrhythmias occurring after routine neuter procedures in young, healthy dogs were assessed during use of 2 anesthetic protocols. Fifty healthy dogs younger than 2 years of age were premedicated with IM acepromazine (0.05 mg/kg), hydromorphone (0.1 mg/kg), and glycopyrrolate (0.01 mg/kg). Dogs in group 1 were induced with propofol (max 4 mg/kg IV) and maintained on isoflurane. Dogs in group 2 were induced with thiopental (max 10 mg/kg IV) and maintained on halothane. Holter monitors were fitted, and electrocardiograms were recorded for at least 20 hours. No significant complications occurred during the study period. Second-degree atrioventricular block, ventricular premature complexes (VPCs), and atrial premature complexes (APCs) were the most common dysrhythmias occurring in the postoperative period (44%, 44%, and 32%, respectively). Significant arrhythmias (defined as 1 or more of the following: more than 100 VPCs or APCs per 24 hours, or any presence of R-on-T phenomenon, ventricular tachycardia, or atrial tachycardia) occurred in 9 dogs after surgery—5 in group 1 and 4 in group 2. All of these dogs were younger than 1 year of age. There was no statistical difference in occurrence between males and females, although females may potentially be predisposed because of a higher pain level associated with spay than castration procedures. No statistically significant difference existed between the 2 anesthetic protocols, although more serious ventricular arrhythmias were noted in the group-2 dogs. Clinicians should be aware of the potential for significant arrhythmias in young, healthy dogs undergoing routine surgery when either of these protocols is used.


Selecting Brain Tumor Treatments

The primary goals of treating brain tumors are to eliminate the tumor, or reduce or preclude growth, and to control secondary effects. This article reviews the literature on current treatments for these types of tumors. Surgery, whether for complete excision, partial removal, or biopsy, is an essential consideration. Studies report varying postoperative mortality rates (between 10% and 19%), and these rates are generally considered acceptable. The most frequent complications of surgery are hemorrhage, anemia, increased intracranial pressure, seizures, brain herniation, infections, and pneumonia. Postoperative prognosis depends on the type of tumor. Chemotherapy can also provide long remissions with high quality of life, although it is rarely curative. The nitrosoureas and antimetabolites are used in treating brain tumors, although many new drugs, drug delivery systems, and multimodality protocols hold promise. Canine intracranial tumors are also responsive to radiation therapy, which can sometimes be the treatment of choice. Different types of tumor seem more radioresponsive than others, and survival times vary from 4.9 to 18 months for different protocols. Hormone therapy for brain tumors consists primarily of corticosteroid administration. A poor prognosis and short